

1. Record Nr.	UNINA9910783482603321
Titolo	Plasma polymer films [[electronic resource] /] / editor, Hynek Biederman
Pubbl/distr/stampa	London, : Imperial College Press, c2004
ISBN	1-281-86644-X 9786611866440 1-86094-538-4
Descrizione fisica	1 online resource (391 p.)
Altri autori (Persone)	BiedermanHynek
Disciplina	668.9
Soggetti	Plasma polymerization Polymers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Plasma Polymer Films; CONTENTS; PREFACE; CHAPTER 1 INTRODUCTION Hynek Biederman; CHAPTER 2 PLASMA DEPOSITION OF FLUOROPOLYMER FILMS IN DIFFERENT GLOW DISCHARGE REGIMES Pietro Favia; CHAPTER 3 DEPOSITION OF SILICON CONTAINING FILMS AND FTIR DIAGNOSTICS Yvan Segui and Patrice Raynaud; CHAPTER 4 CORPUSCULAR DIAGNOSTICS OF PLASMA POLYMERIZATION PROCESSES Michael Zeuner; CHAPTER 5 ELECTRICAL AND OPTICAL PROPERTIES OF PLASMA POLYMERS Jacek Tyczkowski; CHAPTER 6 PULSED PLASMA POLYMERIZATIONS Richard B. Timmons and Andrew J. Griggs CHAPTER 7 DEGRADATION AND STABILITY OF PLASMA POLYMERS Andreas Hollander and Jorg ThomeCHAPTER 8 APPLICATION OF ATMOSPHERIC PRESSURE DISCHARGE FOR PLASMA POLYMER PROCESSES Masuhiro Kogoma; CHAPTER 9 HARD PLASMA POLYMERS, COMPOSITES AND PLASMA POLYMER FILMS PREPARED BY RF SPUTTERING OF CONVENTIONAL POLYMERS Hynek Biederman, Pavel Kudrna and Danko Slavinska; CHAPTER 10 BIOMEDICAL APPLICATIONS OF PLASMA-DEPOSITED THIN FILMS Kathryn J. Kitching, Vicki Pan and Buddy D. Ratner; INDEX
Sommario/riassunto	Plasma Polymer Films examines the current status of the deposition and characterization of fluorocarbon-, hydrocarbon- and silicon-containing

plasma polymer films and nanocomposites, with plasma polymer matrix. It introduces plasma polymerization process diagnostics such as optical emission spectroscopy (OES, AOES), and describes special deposition techniques such as atmospheric pressure glow discharge. Important issues for applications such as degradation and stability are treated in detail, and structural characterization, basic electrical and optical properties and biomedical applications are discussed.
